

INCH-POUND

W-C-596G/GEN  
AMENDMENT 2  
3 October 2001  
SUPERSEDING  
AMENDMENT 1  
8 September 1998

## FEDERAL SPECIFICATION

### CONNECTOR, ELECTRICAL, POWER, GENERAL SPECIFICATION FOR

The General Services Administration has authorized the use of this amendment, which forms a part of W-C-596G/GEN, dated 28 April 1995, by all federal agencies.

#### PAGE 1

2.1, under Government publications, delete:

"Military Specification

MIL-C-55330 - Connectors, Electrical and Fiber Optic, Packaging of."

Delete beneficial comments block and substitute;

"

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center Columbus, ATTN: DSCC-VAI, 3990 East Broad Street, Columbus, OH 43216-5000 by using the self addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

"

#### PAGE 2

2.2, under Other publications, delete "UL 498 - Standard for Attachment Plugs and Receptacles", and substitute:

"ANSI/UL 498 - Standard for Attachment Plugs and Receptacles

ANSI/UL 943 - Standard for Ground-Fault Circuit-Interrupters"

3.2.1, delete and substitute:

"3.2.1 UL or CSA verified connectors. Each contractor shall submit to the contracting agency proof that the connectors supplied under this specification conform to the requirements of American National Standard ANSI/UL 498 and applicable bulletins and, where relevant, of American National Standard ANSI/UL 943 and applicable bulletins. The U.S. listing mark of Underwriters Laboratories, Inc. (UL) or the U.S. certification mark of Canadian Standards Association (CSA/NRTL), may be accepted as evidence that the connectors conform to ANSI/UL 498 requirements for general grade connectors and to additional ANSI/UL 943 requirements for general grade connectors incorporating ground-fault circuit interrupter protection for personnel. The above listing mark and the green dot of ANSI/UL 498 may be accepted as evidence that the connectors conform to ANSI/UL 498 requirements for hospital grade connectors."

AMSC N/A

1 of 5

FSC 5935

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3.2.2, delete and substitute:

“3.2.2 Non-UL or NON-CSA verified connectors. In lieu of the listing mark or listing mark and hospital grade green dot of ANSI/UL 498, the contractor shall submit independent proof, satisfactory to the contracting agency, that the connectors conform to the applicable requirements, including methods of tests, of the published standards of ANSI/UL 498 and, where applicable, ANSI/UL 943.”

“NOTE: ANSI/UL 498 and ANSI/UL 943 will hereinafter be referred to as UL 498 and UL 943, respectively.”

3.5.1, delete and substitute:

“3.5.1 Mounting flanges and plates. Unless otherwise specified (see 3.1), mounting flanges and plates of ferrous material shall be protected against corrosion by galvanizing or by electrodeposition of a suitable metal. Painting alone is not acceptable.”

PAGE 5

3.6.14, delete “UL tests.” and substitute, “UL 498 tests.”

3.7.1.1, delete and substitute:

“3.7.1.1 General grade. Each connector shall be marked in accordance with UL 498 with the manufacturer's trade mark and electrical rating (see 3.1). In addition, a Federal Specification verification mark shall appear on connectors that have met all the requirements of this specification. The Federal Specification verification mark shall be “FS-UL” or “FS-CSA” as applicable or the initials “FS” adjacent to the registered trade mark of UL or CSA.

NOTE: Under the Federal Specification verification program manufacturers may mark a connector with the Federal Specification verification mark even though there is no W-C-596 specification sheet for that connector. However, the connector must comply with all the performance requirements of W-C-596. (This allows for broader use in manufacturing of common parts on which the manufacturer may choose to place the Federal Specification verification mark.)”

3.7.1.2, delete note.

3.7.2, delete and substitute:

“3.7.2 Connectors not supplied under the Federal Specification verification program. Each connector shall be marked with the manufacturer's trade mark and electrical rating (see 3.1). Connectors meeting the performance and test requirements of this specification shall be marked with the W-C-596 Part Identification Number (PIN) in accordance with MIL-STD-1285. The Federal Specification verification mark shall not appear on this category of connectors (see 1.2). The registered trade mark of UL or CSA shall not appear on the connector unless the device separately has UL or CSA listing for the specific grade.”

3.7.3, delete and substitute:

“3.7.3 Package marking. The smallest unit carton or package shall be marked as specified in the contract or order (see 5.1). NOTE: Inclusion of the W-C-596 PIN and a packaging date code is optional, though suggested.

PAGE 6

4.4b., delete and substitute:

"b. By having Underwriters Laboratories or Canadian Standards Association listing and Federal Specification verification. Manufacturers electing this option shall submit a letter of certification to the qualifying activity listing the Underwriters Laboratories or the Canadian Standards Association file number, report date, the Government PIN and the manufacturer's PIN for each connector for which qualification is desired. Qualification approval may be granted upon successful completion of the inspections and tests conducted by UL or CSA upon test samples, such approval to include classes, finishes, configuration, and insert arrangements other than those actually tested providing that the capability to manufacture these parts is demonstrated by providing exhibit samples."

PAGE 8

Table I, note 1/ , delete and substitute: "1/ Not required if UL or CSA listed."

PAGE 10

Table II, note 1/ , delete and substitute: "1/ Not required if UL or CSA listed as hospital grade."

PAGE 11

4.4.2.2, delete first paragraph and substitute:

"Connectors qualified in accordance with 4.4b. The contractor shall forward a report at 12-month intervals to the qualifying activity. The qualifying activity shall establish the initial reporting date. The report shall include certification that the qualified connectors retain the Federal Specification verification mark. Any test data generated by UL, CSA or the contractor shall be made available for review by the qualifying activity upon request."

4.4.3.2, delete first paragraph and substitute:

"Connectors qualified in accordance with 4.4b. Connectors shall be subjected to quarterly re-examination by a representative of Underwriters Laboratories Inc. or Canadian Standards Association. The examination shall include verification of materials, dimensions, configurations, and all other construction and testing requirements specified in UL 498 and any applicable bulletins, and in the Follow-Up Service Procedures issued by UL or by CSA. Once every three years representative samples of each family grouping of connectors shall be subjected to the inspections specified in table III or table IV (as applicable) in the order shown. Sample size shall be as specified in table III or table IV (as applicable)."

4.5.2, delete and substitute:

"4.5.2 Inspection of product for delivery for connectors qualified in accordance with 4.4b. The Federal Specification verification mark shall be evidence of compliance."

4.5.3, delete and substitute:

"4.5.3 Inspection of packaging. The sampling and inspection of the preservation, packing, and container marking shall be as specified in the contract or order (see 5.1)."

PAGE 12

Table III, note 1/ , delete and substitute: "1/ Not required if UL or CSA listed."

PAGE 14

Table IV, note 2/, delete and substitute: "2/ Not required if UL or CSA listed."

Table IV, note 7/, delete and substitute: "7/ Not required if UL or CSA listed as Hospital Grade."

PAGE 17

\* 4.6.14.1, delete and substitute:

"4.6.14.1 Test I. With the sample mounted in the fixture shown on figure 6, the test of the security of the assembly shall consist of a force of 100 pounds minimum applied as shown on figure 7, by means of the push out tool described by figure 8, inserted into the slots of the receptacles. The receptacle shall be visually examined for damage as specified in 3.6.13.1. Other test fixtures may be used for receptacles not compatible with the fixture on figure 6, provided they allow for equivalent testing and meet all test requirements specified herein.

\* 4.6.14.2, delete and substitute:

4.6.14.2 Test II. With the sample mounted in the fixture shown on figure 6, the test of the security of the assembly shall consist of a force of 50 pounds minimum applied to the bridge shown on figure 10, applied as shown on figure 9. When the force is removed, there shall be no evidence of damage as specified in 3.6.13.2 or yoke deformation exceeding .06 inch (1.52 mm) when measured as shown on figure 9. Other test fixtures may be used for receptacles not compatible with the fixture on figure 6, provided they allow for equivalent testing and meet all test requirements specified herein.

4.6.15, delete "UL tests (see 3.6.14)." and substitute, "UL 498 tests (see 3.6.14)."

PAGE 22

5.1, delete and substitute:

"5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department of Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity."

PAGE 23

6.4, last sentence, delete and substitute:

"Information pertaining to qualification of these products may be obtained from the Defense Supply Center Columbus (DSCC-VQ), Columbus, OH 43216-5000."

The margins of this amendment are marked with an asterisk to indicate where changes from the previous amendment were made. This was done as a convenience only and the government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last amendment.

CONCLUDING MATERIAL

MILITARY INTERESTS:

Custodians

Army - CR  
Navy - YD  
Air Force - 11  
DLA - CC

Review activities

Army - AR, AV, CR4, MI  
Navy - AS, EC, MC, SH  
Air Force - 19, 99

CIVIL AGENCY COORDINATING ACTIVITIES:

DCGOVT - DCG  
DOT - ACO  
GSA - 7FXE  
HHS - FEC  
USDA – AFS

PREPARING ACTIVITY:  
DLA - CC

(Project 5935-4356)